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OM nucleic - nucleic search, using sw model
                                                                     Copyright
                                                                   GenCore version 5.1.6 (c) 1993 - 2004 Compugen Ltd.
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Scoring table: Sequence: Run on: Title: Perfect score: IDENTITY_NUC Gapop 10.0 , Gapext 1.0 US-09-972-916B-5 372 June tacactgggggccagagtcc.....ttccgctactagctagccgc 372 7, 2004, 08:46:36; Search time 2644 Seconds (without alignments) 6098.188 Million cell updates/sec

Total number of hits satisfying chosen parameters: Searched: 3470272 seqs, 21671516995 residues 6940544

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries Minimum DB seq length: 0
Maximum DB seq length: 200000000

Database : GenEmbl:*

1: gb_ba:*
2: gb_htg*.
3: gb_in.*
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7: gb_ph:*
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em_sy:*
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Pred. No. is the number of results predicted by chance to have a

score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

41 41.4 42.43 41 43 41 44 41.6	7 42. 9 42. 0 42.	. 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	26 54. 27 55. 28 47. 29 47.	1 214 4 2 144 4 3 188 8 4 188 8 5 98 2 6 76 4 7 76 4 9 76 4 110 76 4 111 63 8 114 63 8 115 63 8 116 63 8 117 63 8 118 63 8 119 65 2 119 65 2 120 60 8 130 60 8 140 63 8 150 63 8	Result No. Score
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ALIGNMENTS

JOURNAL	AUTHORS	REFERENCE				ORGANISM	SOURCE	KEYWORDS	VERSION	ACCESSION	DEFINITION	Locus	RATILGFZ	RESULT 1	
Biochem. Biophys. Res. Commun. (1991) In press	Unterman, T.G., Lacson, R.G., McGary, E., Whalen, C. and Goswami, R.G.	1 (bases 1 to 1181)	Rattus.	Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;	Rattus norvegicus	Rattus norvegicus (Norway rat)	insulin-like growth factor.	M84484.1 GI:204927	M84484	Rattus norvegicus insulin-like growth facter gene fragment.	RATILGFZ 1181 bp DNA linear ROD 27-APR-1993			

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AC136382
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         CE 1 (bases 1 to 185148)

RS Muzny, D. Marie., Metzker, M.Lee., Abramzon, S., Adams, C., Alder, J., Allen, C., Allen, H., Alsbrooks, S., Amin, A., Angulano, D., Angulabechi, V., Aoyaqi, A., Ayodeji, M., Baca, E., Baden, H., Ballebechi, V., Aoyaqi, A., Ayodeji, M., Baca, E., Baden, H., Baldwin, D., Bandaranaike, D., Barber, M., Barnstead, M., Benahmed, F., Biswalo, K., Blair, J., Blankenburg, K., Blyth, P., Brown, M., Bryant, N., Buhay, C., Burch, P., Burrell, K., Calderon, E., Cardenas, V., Carter, K., Cavazos, I., Ceasar, H., Center, A., Cracko, J., Chavez, D., Chen, G., Chen, R., Chen, Y., Chen, Z., Chu, J., Clavelland, C., Cockrell, R., Cox, C., Coyle, M., Cree, A., D'Souza, L., Davila, M.L., Davis, C., Davy-Carroll, L., De Anda, C., Dederich, D., Davila, M.L., Davis, C., Dary-Carroll, L., De Anda, C., Dederich, D., Delgado, O., Denson, S., Deramo, C., Ding, Y., Dinh, H., Divya, K., Draper, H., Dugan-Rocha, S., Dunn, A., Durbin, K., Duval, B., Eaves, K., Egan, A., Escotto, M., Eugene, C., Evans, C.A., Falls, T., Fan, G., Fernandez, S., Finley, M., Flagg, N., Forbes, L., Foster, M., Goter, M., Gebregocygis, E., Geer, K., Gill, R., Garcia, A., Garner, T., Garza, M., Gebregocygis, E., Geer, K., Gill, R., Graddy, M., Guerra, M., Guevara, W., Gunaratne, P., Haeland, W., Hamilton, C., Hamilton, K., Hernandez, J., Hernandez, S., Haddun, S.L., Hodgson, A., Hogues, M., Henderson, N., Homes, J., Jang, H., Johnson, R., Johnson, R., Jolivet, A., Karpathy, S., Kelly, S., Kelly, S., Kan, Z., King, L., Kovar, C., Liu, J., Liu, J
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Karr
Kowis,C., Arr
T., Liu,W., I
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Rattus norvegicus clone CH230-97018,
***, 63 unordered pieces.
AC136382
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AC136382.1 GI:24462257
HTG; HTGS_PHASE1.
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Mammalia; Eutheria;
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/mol_type="genomic DNA"
/strain="Sprague-Dawley"
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97.3%;
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Maheshwari, M., Mahindartne, M., Mahmoud, M., Malty, K., Mangum, B., Mapua, P., Martin, K., Martin, R., Martinez, E., Mingua, B., More, M., Martinez, E., Mingua, B., Mcleod, M., Martin, K., Martin, R., Martinez, E., Mingum, B., Mahiney, S., Mcleod, M., Mcneill, T., Meenen, E., Milosayljevic, A., Minga, E., Montemayor, J., Moore, S., Morgan, M., Morris, K., Morris, S., Manidasa, M., Murphy, M., Nair, L., Nankervis, C., Neal, D., Newton, N., Nguyen, N., Norris, S., Parks, K., Pasternak, S., Paul, H., Perez, A., Perez, L., Pfannkoch, C., Plopper, F., Poindexter, A., Popovic, D., Primus, D., Pul, L.-L., Puazo, M., Quiroz, J., Rachilin, E., Perez, K., Regier, M. A., Reigh, R., Reilly, B., Reilly, M., Ren, Y., Rose, M., Roie, R., Ruiz, S., Riggs, F., Rives, C., Nochey, T., Rojas, A., Scort, G., Shatsman, S., Shen, H., Shetty, J., Shartsbeyn, A., Stong, X. -Z., Sorelle, R., Sosa, J., Steinle, M., Scorey, G., Scherer, S., Song, X. -Z., Sorelle, R., Sosa, J., Steinle, M., Strong, R., Sutton, A., Statek, A., Tabor, P., Taylor, C., Taylor, T., Thomas, N., Thomas, S., Tingey, A., Trejos, Z., Usmani, K., Valas, R., Vera, V., Villasana, D., Warren, R., Weiz, White, F., Willams, G., Warren, J., Warren, R., Weiz, W., White, F., Willams, G., Warren, J., Warren, R., Weiz, W., Wright, D., Wright, R., Wullson, R., Willson, R., Miczyk, R., Holt, R. A., Smith, H.O., Weinstock, G. and Gibbs, R.A. Smith, B., Von Niederhausern, A., Weiss, R., Smith, B.R., Direct Submission

Direct Submission

Unpublished

2 (basses 1 to 185148)

2 (basses 1 to 185148)

3 Rat Genome Sequencing Geneter Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor College of Medicine, One Medicine Center Baylor College of Medicine, One Center: Baylor College of Medicine, One Center Baylor College of Medicine, One Center Clome name: CH230-9018

2 Gequencing vector: plasmid;

3 Gequencing quality: 14569 bases at least Q30

2 Consensus quality: 14569 bases at least Q30

2 Consensus quality: 14569 bases at least Q30
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TITLE
JOURNAL
REFERENCE
AUTHORS
TITLE

JOURNAL

COMMENT

NOTE: Estimated insert size may differ from sequence length
(see http://www.hgsc.bcm.tmc.edu/docs/Genbank draft data.h
NOTE: This is a 'working draft' sequence. It currently
consists of 63 contigs. The true order of the pieces
is not known and their order in this sequence record is
arbitrary. Gaps between the contigs are represented as
runs of N, but the exact sizes of the gaps are unknown.
This record will be updated with the finished sequence as soon as it is available and the accession number will be preserved. 2609 2709 3916 4016 1011 8985: 10258: 10358: 1110: 2608: 2708: 3915: 1010: gap of contig gap of contig gap of contig gap of contig gap of unknown contig of 1532 gap of unknown contig of 1207 gap of unknown contig of 1498 contig of 1010 unknown of 1268 of 1666 unknown of 1273 unknown of 1472 unknown unknown length bp in length bp in length length bp in length bp in length length bp in length length bp in length length length bp in length length length data.html).

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Lee,J., Greenbaum,L., Haber,B.A., Nagle,D., Lee,V., Miles,V., Mohn,K.L., Bucan,M. and Taub,R.
Structure and localization of the IGFBP-1 gene and its expression during liver regeneration
Hepatology 19 (3), 656-665 (1994)
                                      Submitted (23-JUL-1992) R.A. Taub, Univ. of Pennsylvania, Hounghes Medical Institute, Clinical Research Bldg., Room 475, Curie Boulevard, Philadelphia, PA 19104-6145, USA
                                                                                              Nucleic Acids Res.
3 (bases 1 to 1363)
Taub, R.A.
                                                                                                                                                     2 (bases 1 to 1363)
Mohn,K.L., Waddle,J.R. and Taub,R.
Comparison of mouse and human IGFBP-1 genes reveals a potential insulin-responsive sequence and conservation of all intron/exon
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Direct Submission
Submitted (11-APR-2002) Wellcome Trust Sanger Institute, Hinxton, Cambridgeshire, CB10 1SA, UK. E-mail enquirtes:
humquery@sanger.ac.uk Clone requests: clonerequest@sanger.ac.uk
On Apr 12, 2002 this sequence version replaced gi:19847866.
During sequence assembly data is compared from overlapping clones.
                                                                                                                                                                                                                                                    sequence.
AL607124
                                                                                                            Oliver, K.
                                                                                                                                                                                                                                                                                     AL607124 192843 bp DNA Mouse DNA sequence from clone RP23-20C9
                                                                                                                                                                               Mus musculus
                                                                                                                                               Mammalia;
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/VPASCPEISERPAGGGCCPTCALPMGAACGVATARCAQGLSCRALPGEPRPLHALTRG
QGASLPEPAAPATSTLFSSQHE"
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/clone_lib="genomic, lambda
/dev_stage="embryo"
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/product="insulin-like growth factor binding protein-1"
/protein_id="CAA47832.1"
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                                                                                                                                                                                                                                    GI:20145926
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                                                                                                                                             Chordata;
Rodentia;
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Pred. No. 3.6e-
0; Mismatches
                                                                                                                                           Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 10;
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KEYWORDS
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Matches 202;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                where differences are found these are annotated as variations together with a note of the overlapping clone name. Note that the variation annotation may not be found in the sequence submission corresponding to the overlapping clone, as we submit sequences with only a small overlap as described above.

This sequence was finished as follows unless otherwise noted: all regions were either double-stranded or sequenced with an alternate chemistry or covered by high quality data (i.e., phred quality >= 30); an attempt was made to resolve all sequencing problems, such as compressions and repeats; all regions were covered by at least one plasmid subclone or more than one M13 subclone; and the assembly was confirmed by restriction digest. The following abbreviations are used to associate primary accession numbers given in the feature table with their source databases: Em. EMBL; Sw:, SWISSPROT; Tr:, TREMBL; Wp:, WORMPEP; Information on the WORMPEP database can be found at
                                                                                                                     2539
                                                                                                                                                                                                                                                                                                                                                                   2419
                                                         324
                                                                                                                                                                                                                                                                                                   204
                                                                                                                                                                                                                                                                                                                                                                                                                               144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              http://www.sanger.ac.uk/Projects/C_elegans/wormpep RP23-20C9 is from the RPCI-23 Mouse PAC Library constructed by the group of Pieter de Jong.
For further details see http://www.chori.org/bacpac/home.htm
                                                                                                                                                                                                                                                                             CTGACAATCATTAACCCGTGCTGCCGAGCCCAGCCCTTCATAAGGCCCCTGGGTATGGCCAG 263
                                                                                                                                                                                                                                                                                                                                                                                               TGCGCCCATGTCACAAGCAAAACAAACTTATTTTGAACACGGGGATCCTAGCACGCTGCC
CCGTCTGCCCAGAGAGCTGTGACCACCATTGCCACTACTATCTA 2642
                                               CCATCTGCCCAGAGAGCTGTGACCACCACTTCCGCTACTAGCTA 367
                                                                                                                                                                              CCAGCATGGTCCACTGCCCGCGAGACACAAACCCCAGCGAGCATTGAACACTGCACACGG 323
                                                                                                                                                                                                                                          CTGACAATCATTAACCTGTGCCGCACAGCCCGTTCATAAGGCTCTGGGTACGACCAG
                                                                                                                                                                                                                                                                                                                                                               TGTGTAGAGCTCACAAGCAAAACAAACTTATTTTGAACACTGGGGTCCTAGCACGCTGCC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /mol_type="genomic DNA
/db_xref="taxon:10090"
/chromosome="11"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /clone="RP23-20C9"
/clone_lib="RPCI-23"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              50.8%;
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Pred. No. 4.6e-44;
0; Mismatches 22;
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ORGANISM
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

1 (base 1 to 1569)
Strausberg,R.L., Feingold,E.A., Grouse,L.H., Derge,J.G.,
Klausner,R.D., Collins,F.S., Wagner,L., Shenmen,C.M., Schuler,G.D.
Altschul,S.F., Zeeberg,B., Buetow,K.H., Schaefer,C.F., Bhat,N.K.,
Hopkins,R.F., Jordan,H., Moore,T., Max,S.I., Wang,J., Hsieh,F.,
Dlatchenko,L., Marusina,K., Farmer,A.A., Rubin,G.M., Hong,L.,
Stapleton,M., Soares,M.B., Bonaldo,M.F., Casavant,T.L.,
Scheetz,T.E., Brownstein,M.J., Usdin,T.B., Toshiyuki,S.,
Carninci,P., Prange,C., Raha,S.S., Loquellano,N.A., Peters,G.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BC013345 1569 bp mRNA linear ROD Mus musculus insulin-like growth factor binding protein (CDNA clone MGC:14075 IMAGB:4161889), complete cds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MGC
C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GI:15426482
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1569 bp

ROD 12-NOV-2003 :ein 1, mRNA

COMMENT

TITLE

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PUBMED
REFERENCE
AUTHORS
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McKernan, K.J., Malek, J.A., Gunaratne, P.H., Richards, S.,
Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W.,
Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A.,
Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S.,
Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y.,
Bouffard, G.G., Blakesley, R.W., Touchman, J.W., Green, E.D.,
Dickson, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Myers, R.M.,
Butterfield, Y.S., Krzywinski, M.I., Skalska, U., Smailus, D.E.,
Schnerch, A., Schein, J.E., Jones, S.J. and Marra, M.A.
Generation and initial analysis of more than 15,000 full-length
human and mouse cDNA sequences
L. Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NIH MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
Email: cgapbs-romail.nih.gov
Tissue Procurement: Jeffrey E. Green, M.D.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Institute for Systems Biology
http://www.systemsbiology.org
contact: amadan@systemsbiology.org
Anup Madan, Jessica Fahey, Erin Helton, Mark Ketteman, Anuradha
Madan, Stephanie Rodrigues, Amy Sanchez and Michelle Whiting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLML at: http://image.llnl.gov Series: IRAK Plate: 18 Row: i Column: 20
This clone was selected for full length sequencing because it passed the following selection criteria: Hexamer frequency ORF analysis, Similarity but not identity to protein.

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Direct Submission
Submitted (31-AUG-2001) National Institutes of Health, Mammalian
Gene Collection (MGC), Cancer Genomics Office, National Cancer
Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Strausberg,R
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                                                                                                                                                                                                                           /codon_start=1
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QPILMMAISTYSSMMAREIADLKKWKEPCQRELYKYLERLAAAQQKAGDEIYKFYLEN
                                      /db_xref="CDD:smart00121"
768. .995
                                                                                                                                                                                                         CNKNGFYHSKQCETSLDGEAGLCWCVYPWSGKKIPGSLETRGDPNCHQYFNVHN"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /db_xref="taxon:10090"
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/clone_Tib="NCI_CGAP_Li9"
/che="philloB"
/note="thyroglobulin_1; Region: Thyroglobulin type-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /db_xref="MGI:96436"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note="synonym: IGFBP-1"
/db_xref="LocusID:16006"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gene="Igfbp1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       note="Vector: pCMV-SPORT6"
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strain="FVB/N"
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                                                                                                                                      Insulin
                                                                                                                                  growth
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DEFINITION
ACCESSION
VERSION
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AX827271
LOCUS
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AX401932
LOCUS
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KEYWORDS
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Best Local Similarity
                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                        350 CACTTCCGCTACTAGCTA 367
                                                                                                                                                                                                                                                                                             290 CACAAACCCAGCGAGCATTGAACACTGCACACGGCCATCTGCCCAGAGAGCTGTGACCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            317 CACACGGCCATCTGCCCAGAGAGCTGTGACCACCACTTCCGCTACTAGCTA 367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   257 TGGCCAGCCAGCATGGTCCACTGCCCGGCGAGACACAAACCCCAGCGAGCATTGAACACTG
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                                                                                                  Sequence 5
AX827271
AX827271.1
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Rattus.
                   Rattus norvegicus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Molecular toxicology modeling Patent: WO 0210453-A 1608 07-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mendrick, D.,
Elashoff, M.R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 1608 from Patent WO0210453. AX401932
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                                                                    Rattus norvegicus (Norway rat)
                                                                                                                                              AX827271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gene Logic,
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                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   repeat. Thyroglobulin type 1 repeats are thought to be involved in the control of proteolytic degradation. The domain usually contains six conserved cysteines. These form three disulphide bridges. Cysteines 1 pairs with 2, with 4 and 5 with 6"
                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Rattus norvegicus"
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/note="EMBL/GenBank Accession No. NM_013144"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        . .1500
                                                                                                                              from Patent EP1344834.
                                                                                                    GI:39837360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Inc. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Porter, M.W., Johnson, K.R.,
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92.8%;
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Pred. No. 2.3e-11;
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                                                                                                                                              1500 bp
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Best Local S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Rattus norvegicus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rat IG
M58634
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mohn, K.L., Melby, A.E., Tewari, D.S., Laz, T.M. and Taub, R. The gene encoding rat insulinlike growth factor-binding is rapidly and highly induced in regenerating liver mol. Cell. Biol. 11 (3), 1393-1401 (1991)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               M58634.1 GI:204732
IGF binding protein-1.
Rattus norvegicus (Norway rat)
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CACAAACCCAGCGAGCATTGAACACTGCACACGGCCATCTGCCCAGAGAGCTGTGACCAC
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                                                 Conservative
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                                                                                                                                                               /translation="MPEFLTVVSWPFLILLSFQVRVVAGAPQPWHCAPCTAERLELCP PVPASCTEISRPAGCGCCPTCALPLGAAAGGVATARCAQGISCRALPGEBRFLHALTRG OGACTULEPAPATSSLSGSQHEBAKAAVASEDELASSPEMTEGQLLDSFHLMAPSRED QPILWNAISTYSSWRAKBITDLKKWKEPCQRELYKVLEKLAAAQQKAGDBIYKFYLPN QRILWNAISTYSSWRAKBITDLKKWKEPCQRELYKVLEKLAAAQQKAGDBIYKFYLPN QRILWNAISTYSSWRAKBITDLKWKEPCWSGKKIPGSLETRGDPNCHQYFNVQN"
                                                                                                                                                                                                                                                                                                                                                                                                                     source text: Rat, cDNA to Location/Qualifiers
                                                                                                                                                                                                                                           /codon_start=1
/product="IGF binding protein-1"
/protein_id="AAA41380.1"
/db_xref="GI:204733"
                                                                                                                                                                                                                                                                                                                                                            /organism="Rattus norvegicus"
/mol_type="mRNA"
/strain="Fisher"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Rattus norvegicus"
/mol_type="unassigned DNA"
/db_xref="taxon:10116"
                                                                                                                                                                                                                                                                                                             /tissue_type="regenerating liver"
/dev_stage="adult"
|60__a70
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                                                                                                                      product="IGF binding protein-1"
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                                              Score 76.4; DB 10;
Pred. No. 2.3e-11;
0; Mismatches 1;
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Pred. No. 2.
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RESULT 9
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Best Local :
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                                                                                               On Nov 30,
Original so
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AX163782
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                                                                                                                                                            Lacson,R., Oehler,D., Yang,E., Goswami,R. a Dideoxy sequencing and structural analysis growth factor binding protein-1 gene Biochim. Biophys. Acta 1218 (1), 95-98 (199
                                                                                                                                                                                                                                                                                   122979.1 GI:1098472
insulin-like growth factor binding
Rattus norvegicus (Norway rat)
Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gould-Rothberg, B.E., Dipippo, V.A., R. Method of identifying toxic agents ungene expression in liver Patent: WO 0138579-A 46 31-MAY-2001; Curagen Corporation (US)
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
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Lacson, R., Oehler, D.,
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nilarity 98.7%;
Conservative (
                                                                                                source
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/organism="Rattus norvegicus"
/mol_type="genomic DNA"
/strain="Sprague-Dawley"
                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 organism="Rattus norvegicus"
/mol_type="unassigned DNA"
/db_xref="taxon:10116"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                             1995 this sequence version replaced gi:385167 ource text: Rattus norvegicus (strain Sprague-
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Patent WO0138579
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Rodentia;
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Sciurognathi; Muridae;
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                                                                                             (strain Sprague-Dawley)
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s of the rat insulin-like
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(IGFBP-1)
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; Murinae;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                             Papio anubis insulin-like growth gene, partial cds.
AV095345
1 (bases 1 to 3886)
Kim,J.J., Taylor,H.S., Akbas,G.E., Foucher,I., Trembleau,A.,
Jaffe,R.C., Fazleabas,A.T. and Unterman,T.G.
Regulation of insulin-like growth factor binding protein-1 promoter
activity by FKHR and HOXA10 in primate endometrial cells
Biol. Reprod. 68 (1), 24-30 (2003)
                                                                                                                                                                                                          Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
                                                                                                                                                                                                                                                                     Papio anubis (olive baboon)
Papio anubis
                                                                                                                                                                                                                                                                                                                                                           AY095345.1 GI:20853764
                                                                                                                                                                                  Cercopithecinae; Papio.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CACAAACCCAGCGAGCATTGAACACTGCACACGGCCATCTGCCCAGAGAGACTGTGACCAC
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PVPASCPEISRPAGCGCCPTCALFLGAAAGGVATAACAGCISCRALFGEFRFLHALTRG
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OGACVLEPAAFATSSLSGSQHEEAKAAVASEDBLAESPEMTERQLLDSFHLMAPSRE
OPILWNAISTYSSMRAREITDLKKWKEPCQRELYKVLERLAAAQQKAGDEIYKFYLPN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /dev_stage="adult"
/tissue_lib="Clontech EMBL-3
60. .525
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/gene="IGFBP-1"
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| 1960 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | 
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/gene="IGFBP-1"
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/sex="male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              874. .3002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      'gene="IGFBP-1"
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Pred. No. 2.4e-11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
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ACCESSION
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KEYWORDS
SOURCE
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                                                                                                                                                                                                    AUTHORS
TITLE
                                                                                                                                                                                  JOURNAL
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PUBMED
REFERENCE
AUTHORS
TITLE
JOURNAL
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Best Local Similarity
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Kim, J. J., Jaffe, R.C. and Fazleabas, A.T.
Direct Submission
Submitted (11-APR-2002) Department of Obstetrics and Gynecology,
University of Illinois at Chicago, 820 S. Wood, Chicago, IL 60612,
                                                                                                          GENE
                                                                                                                         Alvares, C., Horne, D., Peres-da-Silva, S. and Gene expression profiles in liver cancer Patent: WO 0229103-A 2394 11-APR-2002;
                                                                                                                                                                                                                                                                                                           AX409747 61
Sequence 2394 from Patent AX409747
AX409747.1 GI:21442452
                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; E
Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
                                                                                                                                                                                                                                                  Homo sapiens (human)
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                                                                                                          LOGIC INC (US)
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3655..>386
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PASCSEVTRSAGCGCCPMCALPLGAACGVATAR"
/organism="Homo sapiens"
/mol_type="unassigned DN
/db_xref="taxon:9606"
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<3655. .>3886
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/mol_type="genomic DNA"
/db_xref="taxon:9555"
<3655. .>3886
                                                                                  Location/Qualifiers
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                                                                                                                                                                                                                             Euteleostomi;
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REFERENCE
AUTHORS
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HUMIGFBP1A
LOCUS
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PUBMED
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
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                                                                              mRNA
                                                                                                       gene
                  exon
                                                                                                                                                                                               CAAT_signal
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                                                                                                                                                                                                                                                                                                                                      Charon4A)
                                                                                                                                                                                                                                                                                                                                                Original source text: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                               Genomics 12 (3), 497-502 (1992)
                                                                                                                                                                                                                                                                                                                                                                                                               chromosome 7
                                                                                                                                                                                                                                                                                                                                                                                                                           Contiguous localization of the genes encoding human insulin-like growth factor binding proteins 1 (IGBP1) and 3 (IGBP3) on
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 (bases 1 to 6128)
Ehrenborg, E., Larsson, C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 insulin-like growth factor binding protein.
Homo sapiens (human)
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                                                                                                                                                     /note="G00-120-075" 569. .573
                                               /gene="IGFBP1"
product:
                                                                                                                                                                                                                                                 organism="Homo sapiens"

/mol_type="genomic DNA"

/db_xref="taxon:9606"

/man_"7n11-n12"
                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                     liver DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note="EMBL/GenBank Accession No.
                                                                                       /note="G00-120-075"
join(597..1110,2657.
/gene="IGFBP1"
                               note="G00-120-075"
                                               product="insulin-like
                                                                                                                                       'gene="IGFBP1"
                                                                                                                                                                                 gene="IGFBP1"
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_lib="lambda Charon4A"
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Pred. No. 1.
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                                                                           .2826,4041.
                                             growth factor binding protein
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                               ----CATCCAGCGAGCATCTGCCGCCGCCGCCGCCACCCTCCCAGAGAGCACTGGCCA
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4170. .5068
/gene="IGFBP1"
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SASCSEVTRSACCGCCPMCALPLGAACGVATARCARGLSCRALPGEQQPLHALTRGQG
ACYQESDASAPHAARAGSPESSESTESIETEBELLDUPHLMAPGSBEDHSTLMDATSTYDG
SKALHVTNIKKMKBPCRIELYRVVBSLAKAQETSGBEISKFYLPNCNKNGFYHSRQCE
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/note="G00-120-075"
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/protein_id="AAA52784.1"
/db_xref="GI:184812"
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note="G00-120-075"
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Pred. No. 1.2e-07;
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Synonyms: IGFBP1
GDB: GDB:3754042
GDB_DSEG: IGFBP1
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8WSS752
                                                                                                         This STS was developed from sequence determined by investigator. See GenBank record: M74587 For additinformation about the NHGRI chromosome 7 mapping puttp://www.nhgri.nih.gov/DIR/GTB/CHR7. Also see Ger 11:548-64 (1991) [MUID=92128937].
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Email: egreen@nhgri.nih.gov
Primer A: TATCACAGCAGACAGGTAGG
Primer B: TGAGGAACCCAAGATCCAAG
STS 81ze: 340
PCR Profile:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Genome Technology Branch
National Human Genome Research Institute/NIH
49 Convent Dr., MSC4431, Bldg. 49, Rm. 2A08,
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Bouffard,G.G., Iyer,L.M., Idol,J.R., Braden,V.V., Cum
Weintraub,L.A., Mohr-Tidwell,R.M., Peluso,D.C., Fulto:
Leckie,M.P. and Green,B.D.
A collection of 1814 human chromosome 7-specific STSs
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                 /organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                   /map="7"
                                                                                              Location/Qualifiers
 /clone_lib="Eric D. Green"
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                                                                                                                               Also see Genomics
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M59316.1 GI:184809
insulin-like growth f
Homo sapiens (human)
                                                                                                                                                                                                                        2 (bases 1 to 6480)
Suwanichkul,A., Cubbage,M.L. and Powell,D.R.
The promoter of the human gene for insulin-like growth factor
binding protein-1. Basal promoter activity in HEP G2 cells depends
upon liver factor B1
J. Biol. Chem. 265 (34), 21185-21193 (1990)
                                                                                                                                                                                                                   J. Biol. Chem.
                                                                                                                                                                                                                                                                                                                                                   Cubbage, M.L., Suwanichkul, A. and Powell, D.R. Structure of the human chromosomal gene for the insulin-like growth factor binding protein Mol. Endocrinol. 3 (5), 846-851 (1989)
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Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
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.4771,5662. .4771,5662.

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note="G00_120-075; putative"
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Maximum Match 10 Total number of hits satisfying chosen parameters: Searched: Title: Perfect score: 92: ı seq length: 0
seq length: 2000000000 nucleic search, using sw model N_Geneseq_29Jan04:*
1: geneseqn1980s:*
2: geneseqn1990s:*
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4: geneseqn2001as:*
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7: geneseqn2003as:* US-09-972-916B-5 372 IDENTITY_NUC Gapop 10.0 , Gapext 1.0 3373863 seqs, 2124099041 residues June Listing first 45 summaries tacactgggggccagagtcc.....ttccgctactagctagccgc 372 GenCore version Copyright (c) 1993 - 2004 geneseqn2003bs:*
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(without alignments)
4661.739 Million cell updates/sec 100% 5.1.6 Compugen Ltd. 6747726

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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The invention relates to an insulin regulator construct comprising a glucose response element (GIRE) of a liver pyruvate kinase (LPK) gene promoter and an insulin-sensitive element (ISE) of an insulin-like growth factor binding protein-1 (IGFBP-1) basal promoter. The construct is used to treat or prevent diabetic complications, to regulate insulin

New insulin regulator cassette, useful e.g. for treating diabetes, provides specific, glucose-inducible transgenic expression of insulin in liver cells.

WPI; 2002-674190/72.

Thule

PM;

11-OCT-2000; 2000US-0239113P.

(THUL/) THULE P M.

Claim 9; Page 14; 37pp; English.

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ALIGNMENTS

ABX15375 standard; DNA;

372 BP.

RESULT 1
ABX15375
ID ABX1
XX ABX1
AX ABX1
XX ABX1
AX ABX1
AX ABX1
AX Gluc
KW Insu
KW Insu
KW Gluc
KW Insu
KW I Glucose response element; GIRE; liver pyruvate kinase; LPK; ds; IGFBP-1; insulin-sensitive element; ISE; basal promoter; hyperglycaemia; insulin; insulin-like growth factor binding protein-1; hypoglycaemia; glucose; fat catabolism; protein catabolism; carbohydrate; glucocorticoid; rat; glucagon; euglycaemia; diabetes; fasting; ketogenesis; ketoacidosis; hepatcoyte; hepatcoma; cellular protein degradation; antidiabetic; hepatcoyte; hepatcoma; cellular protein degradation; antidiabetic; Rat insulin regulator construct DNA #3. 10-OCT-2001; 2001US-00972916 08-AUG-2002. US2002107198-A1 Synthetic. Rattus norvegicus. 17-APR-2003 ABX15375; intracellular hormone receptor; insulin regulator construct; anabolic. (first entry)

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Query Match
Best Local S
Matches 372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     increase fat catabolism and to retard protein catabolism. The construct provides stimulation of insulin expression by glucose (but not other carbohydrates) and glucocorticoids and inhibition by glucagon so that a combination of these effects can maintain nearly euglycaemic conditions in diabetics during short-term fasting, large carbohydrate loads or when fed ad libitum and prevent pathological ketogenesis and ketoacidosis, thus inhibiting the long-term complications of diabetes. The properties of the construct are essentially specific for hepatocytes and well-differentiated hepatoma lines and insulin expression in these cells may have effects additional to those provided by secreted insulin, e.g. inhibition of other intracellular hormone receptors. This sequence represents a rat insulin regulator construct of the invention
                                                                                                                                    Glucose response element; GIRE; liver pyruvate kinase; LPK; ds; IGFBP-1; insulin-sensitive element; ISE; basal promoter; hyperglycaemia; insulin; insulin-like growth factor binding protein-1; hypoglycaemia; glucose; fat catabolism; protein catabolism; carbohydrate; glucocorticoid; rat; glucagon; euglycaemia; diabetes; fasting; ketogenesis; ketoacidosis; hepatoyte; hepatoma; cellular protein degradation; antidiabetic;
                                                                              Rattus norvegicus
                                                                                                                     hepatocyte; he
intracellular
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372; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTAGCTAGCCGC 372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CATAAGGCCCTGGGTATGGCCAGCCAGCATGGTCCACTGCCCGCCGAGACACAAACCCAG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 on, to modulate hyperglycaemia (without severe hypoglycaemia), fat catabolism and to retard protein catabolism. The construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGAGCATTGAACACTGCACACGGCCATCTGCCCAGAGAGCTGTGACCACCACTTCCGCTA
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Pred. No. 4.9e-103;
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                                                                                                                   regulator construct; anabolic
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                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Sim
Matches 321;
                                                                                                                                                                                                                                                                                                                                                                                  Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New insulin regulator cassette, useful e.g. for treating diabetes, provides specific, glucose-inducible transgenic expression of insuliver cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 321 BP;
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301
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                  CTTCCGCTACTAGCTAGCCGC
                                                                               CCAGCCCTTCATAAGGCCCTGGGTATGGCCAGCCAGCATGGTCCACTGCCCGCCGAGAGACA
                                                                                                                                                                                                                                                                                      CTTCCGCTACTAGCTAGCCGC
                                                             CAAACCCAGCGAGCATTGAACACTGCACACGGCCATCTGCCCAGAGAGCTGTGACCACCA
                                                                                                                          CCAGCCCTTCATAAGGCCCTGGGTATGGCCAGCCAGCATGGTCCACTGCCCGCCGAGACA
                                                                                                                                                                                         TATTTTGAACACGGGGATCCTAGCACGCTGCCCTGACAATCATTAACCCCGTGCTGCCGAG
                                                                                                                                                                                                                      TATTTTGAACACGGGGATCCTAGCACGCTGCCCTGACAATCATTAACCCGTGCTGCCGAG
                                                                                                                                                                                                                                                     TACACTGGGGGCCAGAGTCCAGGAACCACGGGAGTGCCCCGTGCGCCCCATGTACACTGGG
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0; Mismatches
321
                               372
                                                                                                                                                                                                                                                                                                                                                                                                                                            49 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                            DB 6;
1.5e-87;
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                                                                                                                                                                                                                                                                                                                                                                                                            Length 321
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                                                                                                                                                                                                                                                  Query Match
Best Local S
Matches 297
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New insulin regulator cassette, useful e.g. for treating diabetes, provides specific, glucose-inducible transgenic expression of insulin
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122 CAGGAACCACGGGAGTGCCCCGTGCGCCCATG
                                                                                                                                                                                                                                                     297;
                                                                      94
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                                                                                                                                                                                                                                                                          Similarity
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                                                                                                                                                           ACTCTGGCCCCAGTGTACATGGGCGCACGGGCACTCCCGTGGTTCCTGGACTCTGGCC
                                                                  CCCAGTGTACATGGGCGCACGGGGCACTCCCGTGGTTCCTGGACTCTGGCCCCCAGTGTA
                                                                                                                                                                                                        ACACTGGGGCCAGAGTCCAGGAACCACGGGAGTGCCCCGTGCGCCCATGTACACTGGGG
                                                                                                                                                                                                                                                60.1%;
ilarity 76.2%;
Conservative
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                                                                                                                                                                                                                                                                                                                                              BP;
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                                                                                                                                                                                                                                                                                                                                            A; 149
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                                                                                                                                                                                                                                                Score 223.6; DB 6;
Pred. No. 6.3e-58;
0; Mismatches 74;
                                                                                                                                                                                                                                                                                                                                            116 G;
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                                                                                                                                                                                                                                                                                                                                          Other;
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insulin;
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RESULT 4
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                                                                                                                                                                                                                                                                                                                                                                                                                   9; Page 13-14; 37pp; English.
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on of insulin
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   insulin;
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The invention relates to an insulin regulator construct comprising a glucose response element (GIRE) of a liver pyruvate kinase (LPK) gene promoter and an insulin-sensitive element (ISE) of an insulin-like growth factor binding protein-1 (IGFBP-1) basal promoter. The construct is used to treat or prevent diabetic complications, to regulate insulin increase fat catabolism and to retard protein catabolism. The construct provides stimulation of insulin expression by glucose (but not other carbohydrates) and glucocriticoids and inhibition by glucagon so that a combination of these effects can maintain nearly euglycaemic conditions in diabetics during short-term fasting, large carbohydrate loads or when fed ad libitum and prevent pathological ketogenesis and ketoacidosis, thus inhibiting the long-term complications of diabetes. The properties

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The invention relates to an insulin regulator construct comprising a glucose résponse element (GIRE) of a liver pyruvate kinase (LPK) gene promoter and an insulin-sensitive element (ISE) of an insulin-like gro
                                                                                New insulin regulator cassette, useful e.g. for provides specific, glucose-inducible transgenic liver cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              of the construct are essentially specific for hepatocytes and well-differentiated hepatoma lines and insulin expression in these cells have effects additional to those provided by secreted insulin, e.g. inhibition of cellular protein degradation, and inhibition, or stimulation of other intracellular hormone receptors. This sequence represents a rat insulin regulator construct of the invention
                                                     Claim 8; Page 13; 37pp; English
                                                                                                                                        WPI; 2002-674190/72.
                                                                                                                                                                   Thule
                                                                                                                                                                                                                    11-OCT-2000;
                                                                                                                                                                                                                                               10-OCT-2001; 2001US-00972916.
                                                                                                                                                                                                                                                                          08-AUG-2002
                                                                                                                                                                                                                                                                                                    US2002107198-A1.
                                                                                                                                                                                                                                                                                                                            Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                    glucagon; euglycaemia; diabetes; fasting; ketogenesis; ketoacidosis;
hepatocyte; hepatoma; cellular protein degradation; antidiabetic;
                                                                                                                                                                                                                                                                                                                                                                                               Glucose response element; GIRE; liver pyruvate kinase; LPK; ds; IGFBP-1; insulin-sensitive element; ISE; basal promoter; hyperglycaemia; insulin; insulin-like growth factor binding protein-1; hypeglycaemia; glucose; fat catabolism; protein catabolism; carbohydrate; glucocorticoid; rat;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rat insulin-sensitive element (ISE) DNA.
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                                                                                                                                                                                                                                                                                                                                                         intracellular hormone
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                                                                                                                                                                                                                                                                                                                                                         receptor;
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Pred. No. 1e
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                                                                                                                                                                                                                                                                                                           Matches
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    factor binding protein-1 (IGFBP-1) basal promoter. The construct is used
                                                                                                                                                                                                                                                                                                                             Local
                                      334
                                                                            121
                                                                                                                274
  181
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                                                                                                                                                                                                                                                                   154 TCACAAGCAAAACAAACTTATTTTGAACACGGGGATCCTAGCACGCTGCCCTGACAATCA 213
                                                                                                                                                                                                                                                                                                         219;
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                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                       219
                      AGAGAGCTGTGACCACCACTTCCGCTACTAGCTAGCCGC
                                                                                                    CCACTGCCCGACGACACAAACCCAGCGAGCATTGAACACTGCACACGGCCATCTGCCC
                                                                                                                                                      CCACTGCCCGCCGAGACACAAACCCAGCGAGCATTGAACACTGCACACGGCCATCTGCCC
                                                                                                                                                                                                                              TCACAAGCAAAACAAACTTATTTTGAACACGGGGATCCTAGCACGCTGCCCTGACAATCA
AGAGAGCTGTGACCACCACTTCCGCTACTAGCTAGCCGC
                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                     BP;
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                                                                                                                                                                                                                                                                                                                           58.9%;
                                                                                                                                                                                                                                                                                                                                                                                     77 C;
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                                                                                                                                                                                                                                                                                                                           Score 219; DB 6; 1
Pred. No. 1.3e-56;
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                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                     G; 37 T;
                                                                                                                                                                                                                                                                                                                                                                                   0 U; 0 Other;
                                                                                                                                                                                                                                                                                                           0,
                                                                                                                                                                                                                                                                                                                                             Length 219
                                    372
219
                                                                                                                                                                                                                                                                                                           Indels
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                                                                            180
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RESULT 6
ABX15376 c
ID ABX15376 s
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AC ABX15376;
XC
AC ABX15376;
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DF 17-APR-200
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CHARLES ACT INSULT
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XX
DE Rat insult
XX
Glucose re
KW insulin-s;
XW insulin-s;
XW insulin-s;
XW insulin-s;
XW intracellin
XW glucagon;
XW hepatocyte;
KW intracellin
XW intracellin
XX
PR intracellin
XX
PN US2002107:
XX
PN US2002107:
XX
PN US2002107:
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PN US2002107:
XX
PN 10-OCT-200
XX
PN 11-OCT-200
XX
PN 11-OCT-200
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PN 11-OCT-200
XX
PN Thule PM;
XX
                                                                                                                                                                                                                                                                                                                                                                                                                    Glucose response element; GIRE; liver pyruvate kinase; LPK; ds; IGFBP-1; insulin-sensitive element; ISE; basal prometer; hyperglycaemia; insulin; insulin-like growth factor binding protein-1; hypoglycaemia; glucose; fat catabolism; protein catabolism; carbohydrate; glucocorticoid; rat; glucagon; euglycaemia; diabetes; fasting; ketogenesis; ketoacidosis; hepatrocyte; hepatroma; callular protein degradation; antidiabetic; intracellular hormone receptor; insulin regulator construct; anabolic.
                                                                                                                                                                                                                                                                                                                                           Rattus norvegicus.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rat insulin regulator construct DNA #4.
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08-AUG-2002 US2002107198-A1

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RESULT 7
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XX ABK6
XX Rat;
XX R
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Best Local
                              31-JUL-2000;
02-NOV-2000;
11-MAY-2001;
15-MAY-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rat sequence differentially expressed in response to a hepatotoxin #1608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABK63701 standard; cDNA; 1500 BP
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                                                                                                                                                                                            30-JUL-2001; 2001WO-US023872.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         represents a rat insulin regulator construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ss; hepatotoxin;
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                                                                                                                                                                                                                                                                                                                                                                                  norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 TACACTGGGGGCCAGAGTCCAGGAACCACGGGAGTGCCCCCGTGCGCCCCATGTACACTGGG
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                                                                                              2000US-0222040P.
2000US-0244880P.
2001US-0290029P.
2001US-0290645P.
2001US-0292336P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      expression;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       41.4%; Score 154; DB 6; 100.0%; Pred. No. 8.9e-37;
                                                                                                                                                                                                                                                                                                                                                                                                                                               expressed sequence tag; EST; drug screening; on; centrilobular necrosis; steatosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0,
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RESULT 8 ABT41911 ID ABT4

ABT41911 standard;

DNA;

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SARAR

26-JUN-2003

(first entry)

Toxicity modelling related rat gene SEQ ID No 1613

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C global changes in gene expression in tissues or cells exposed to the cells. Also included are methods of predicting at least one toxic effect of a compound or progression of a toxic effect, preferably the compound or progression of a toxic effect, preferably the compound or progression of a toxic effect, preferably the compound or progression of a toxic effect, preferably the compound or progression of a toxic effect, preferably the compound or progression of a toxic effect, preferably the compound in a tissue or cell sample exposed to the compound of two or compound expression of the genes is indicative of at least one toxic effect or progression. The method can also be used to identify an agent which modulates the toxic cresponse and predict cellular pathways that a compound modulates in a cell. The methods utilise a set of at least two probes (on a solid composition) where each of the probes comprises a sequence that support in kit form), where each of the probes comprises a sequence that compount in a tissue or cell sample exposed to a hepatotoxin of a set of genes comprising at least two genes listed in the specification, a computer compression level in a tissue or cell sample exposed to a hepatotoxin of a set of genes comprising at least two genes listed in the specification, a computer compression information level in a tissue or cell of at least one gene containing the expression and for identifying toxicity markers in consisted in the specification, and toxicity markers in the genes may be used as concity markers in the genes and considered to a known toxin. The genes may be used as concity markers for the prediction or identification may be used as diagnostic markers for the genes and considered by centrilobular necrosis and steatosis. The present concity which is differentially expressed in response to a hepatotoxicity agene
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13-JUN-2001; 2001US-0297457P
19-JUN-2001; 2001US-0298884P
09-JUL-2001; 2001US-0303459P
                                                                                                                                                                                                                                                        Sequence 1500 BP; 336 A; 408 C; 380 G; 376 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to methods for predicting toxic effects of compounds or the progression of these toxic effects by determining
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; SEQ ID NO 1608; 239pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      tissues or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2002-241625/29.
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                                                                                                                                                                                         Local
                                        350 CACTTCCGCTACTAGCTA 367
                                                                                                                           290 CACAAACCCAGCGAGCATTGAACACTGCACACGGCCATCTGCCCCAGAGAGCTGTGACCAC
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                                                                                                                                                                                         Similarity
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                                                                                                                                                                       Conservative
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                                                                                                                                                                                         20.5%;
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85
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Pred. No.
                                                                                                                                                                       Mismatches
                                                                                                                                                                                       76.4; DB 6
No. 5e-13;
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Toxic effect;

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28-AUG-2001
27-SEP-2001
22-OCT-2001
21-NOV-2001
21-NOV-2001
06-DEC-2001
19-DEC-2001
21-FEB-2002
21-FEB-2002
21-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                               The invention relates to a novel method of predicting at least one toxic effect of a compound. The method comprises a gene expression profile of tissue or cell sample exposed to the compound, and comparing the gene expression profile to a database comprising at least part of the data or information given in the specification. The methods are useful for predicting at least one toxic effect of a compound, predicting the progression of a toxic effect of a compound, predicting the renal toxicity of a compound, or identifying toxicity markers in tissues or cells exposed to known renal toxin. The genes are useful as toxicity markers in drug screening and toxicity assay, in monitoring disease or physiological states, or disease progression. This polynucleotide represents a rat DNA sequence relating to the toxic effect database described in the specification. NOTE: The sequence data for this patent and the specification of the sequence is a sequence of the sequence of
                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                              electronic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          predicting at least one toxic effect of a compound, useful for toxicity modeling, comprises preparing a gene expression profile of a tissue or cell sample exposed to the compound, and comparing the gene expression profile to a database.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2003-148464/14.
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290 CACAAACCCAGCGAGCATTGAACACTGCACACGGCCATCTGCCCAGAGAGCTGTGACCAC
                                                                                                          . Similarity
77; Conser
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2001US-0330462P.
2001US-0330867P.
2001US-0331805P.
2001US-0336144P.
2001US-0340873P.
2001US-0340873P.
2002US-0357844P.
2002US-0357844P.
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2001US-0298925P.
2001US-030380P.
2001US-0303080P.
2001US-0303810P.
2001US-0315047P.
                                                                                                      Conservative
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2002US-0370144P.
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g screening; toxicity assay; rat; ds.
                                                                                                                                                                                                                                 ₽P;
                                                                                                                                                                                                                                                                                                                          specification. NOTE: The sequence data for this of the printed specification, but was obtained directly from the World Intellectual Property
                                                                                                                                                                                                                              336 A; 408
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                                                                                                   Score 76.4; DB 7;
Pred. No. 5e-13;
0; Mismatches 1;
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                                                                                                                                                                                                                                                                                                                       Property
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CACAAACCCAGCGAGCATTGAACACTGCACACGGCCATCTGCCCAGAGAGCTGTGACCAC

67

Query Match Best Local S Matches

1 Similarity 77; Conserv

Conservative

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Score 76.4; DB Pred. No. 5e-13; D; Mismatches

9; <u>,,</u>

Length 1500; Indels

0

Gaps

20.5%;

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RESULT 9
ADB58201
                                                                                             The present invention relates to a method for predicting a toxic effect of a compound. The method comprises preparing a gene expression profile of a tissue or cell sample exposed to the compound, and comparing the compound profile to a database compound and comparing the compound profile to a database compound SEQ ID 1-4925, where the method is useful for predicting the least one toxic effect. The method is useful for predicting the least one toxic effect of a compound, predicting hepatotoxicity or the progression of a toxic effect of a compound, identifying an agent that modulates the onset or compound modulates in a cell, and identifying an agent that modulates at least one activity of a protein. The method and compositions of the compound modulates in a cell, and identifying an agent that modulates at least one activity of a protein. The method and compositions of the composition using a database of genes having liver toxin-induced composition, are useful in identifying toxicity markers in confidence data for this patent did not form part of the printed sequence data for this patent did not form part of the printed sequence data for this patent did not form part of the printed sequence data for this patent did not form part of the printed sequence data for this patent did not form part of the printed sequence data for this patent did not form part of the printed sequence data for this patent did not form part of the printed sequence data for this patent did not form part of the printed sequence data for this patent did not form part of the printed sequence data for this patent did not form part of the printed sequence data for this patent did not form part of the printed sequence data for this patent did not form part of the printed sequence data for this patent did not form part of the printed sequence data for this patent did not form part of the printed sequence data for this patent did not form part of the printed sequence data for this patent did not form part of the printed sequence data for this paten
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15-MAR-2002;
30-DEC-2002;
Sequence 1500 BP; 336 A; 408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Predicting a toxic effect of a compound, useful in identifying toxicity markers in liver tissues or cells for drug screening and toxicity assays, comprises preparing gene expression profile of tissue or cells exposed to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     comprises preparing gene the compound.
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                                                                            ftp.wipo.int/pub/published_pct_sequences.
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380 G;
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376 T;
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0 U; 0 Other;
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RESULT 10
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08-MAY-2002;
09-MAY-2002;
09-MAY-2002;
09-MAY-2002;
09-MAY-2002;
The present invention describes a method for determining whether a compound induces a toxic effect on a tissue or cell. The method comprises preparing a gene expression profile of a tissue or cell sample exposed to the compound, and comparing the gene expression profile to a database comprising data or information on the Tox mean and non-Tox mean value. The method is useful for predicting or identifying at least one toxic effect, particularly hepatotoxicity, of a test or unknown compound. The genes listed in the specification are useful as diagnostic or toxicity markers for the prediction or identification of the physiological state of tissue or cell sample that has been exposed to a compound, or to identify or predict the toxic effects of a compound or an agent. These may also be used as markers for monitoring toxicity progression or for
                                                                                                                                                                                                                               Determining if a compound induces a toxic effect on a tissue or cell, for identifying hepatotoxic compounds, comprises comparing a gene expression profile of a tissue or cell sample to a database of Tox mean and non-Tox
                                                                                                                                                                                                                                                                                                                     Mendrick D,
Elashoff M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              toxicity marker; toxicity progression; drug primary rat hepatocyte toxicity modelling;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          toxic effect; gene expression profile; hepatotoxicity; toxicity marker; toxicity progression; drug screening;
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                                                                                                                                                                                         Claim 44; SEQ
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2002US-0371134P
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2002US-0373602P
2002US-03784139P
2002US-0378379
2002US-0378379
2002US-0378379
2002US-0378552P
2002US-0378653P
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2002US-0394253P.
                                                                                                                                                                                      ID NO 3252; 874pp; English.
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                                      The present invention describes a method of screening a test agent for chepatotoxicity. The method comprises: (a) providing a test cell population comprising a cell capable of expressing one or more nucleic acid sequences selected from the group consisting of RISKWARKER 1-8 and INJURYWARKER 1-10; (b) contacting the test cell population with a test agent; (c) measuring expression of one or more of the nucleic acid sequences in the test cell population; (d) comparing the expression of the nucleic acid sequence in the test cell population to the expression of the nucleic acid sequence in an reference cell population comprising at least one cell whose exposure status to a hepatotoxic agent in known; and (e) identifying a difference in expression levels of the RISKWARKER or INJURYMARKER sequences, if present, in the test cell population and reference cell population. The method is useful for identifying a diffication of the present. The present sequence is given in the exemplification of the present invention and reference cell population.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches 77;
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18-FEB-2000;
20-NOV-2000;
                                                                                                                                                                                                                                                                                                                                     Screening hepatotoxic agent comprises contacting test cell population expressing RISKMARKER or INJURYMARKER with agent, comparing expression with reference population and identifying difference in expression
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                                                                                                                                                                                                                                                                                      Disclosure; Page 22-24; 76pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                    Gould-Rothberg BE,
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non-steroidal antiinflammatory drug; ds.
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                            the present invention
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2000US-0183531P.
2000US-00717321.
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Sequence 5001 BP; 1225 A; 1204 C;

1261

G; 1311 T; 0

Length 5001;

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RESULT 12
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                                  Matches 156;
                                                  Query Match
Best Local (
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Best Local Similarity
                                                                                                                                                hepatocellular carcinoma in a patient, involving detecting the level of expression of two or more genes represented in ABN93503-ABN97455 in a tissue sample. The method of the invention has hepatotropic, and cytostatic activity. The method is useful for diagnosing and detecting the progression of liver cancer, hepatocellular carcinoma and metastatic liver carcinoma in a patient. The method is useful for identifying expression profiles which serve as useful diagnostic markers as well as markers that can be used to monitor disease states, disease progression, drug toxicity, drug efficacy and drug metabolism. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                        Diagnosing and detecting the progression of liver cancer, hepatocellular carcinoma or metastatic liver tumor in a patient, involves detecting the level of expression of two or more genes in a liver tissue sample.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gene; liver cancer; ds; hepatocellular carcinoma; hepatotropic; metastatic liver tumour; cytostatic; expression profile; disease state; disease progression; drug toxicity; drug efficacy; drug metabolism.
                                                                                                   Sequence 6128 BP; 1504 A; 1497 C; 1504 G; 1623 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                     The invention relates to a novel method for diagnosing and detecting the progression of liver cancer, hepatocellular carcinoma or metastatic liver tumour in a patient, and differentiating metastatic liver cancer from hepatocellular carcinoma in a patient, involving detecting the level of
                                                                                                                                                                                                                                                                                                                                                                                                         Claim 1; SEQ ID NO 2394; 298pp; English.
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                                                                                                                                 ftp.wipo.int/pub/published_pct_sequences
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350 CACTTCCGCTACTAGCTA
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                                                    Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alvares C,
                                  Conservative
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                                                17.2%;
63.2%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    367
                                 0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
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Pred. No. 7.3e-13;
0; Mismatches 1;
                                 Score 63.8; DB 6;
Pred. No. 5.2e-09;
0; Mismatches 72;
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                                                                  Length 6128;
                                  Indels
                                  19;
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cancer; human; IGFBP-1; gene; ds.
                                                                             03-MAY-2001; 2001US-0288441P.
                                                                                                                              03-MAY-2002; 2002WO-AU000558
                                                                                                                                                                                                                                       WO200290580-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         07-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABV75371;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABV75371 standard; DNA; 6128 BP
(NACA-) NAT CANCER CENT SINGAPORE PTE LTD. (SIGE-) SINGAPORE GEN HOSPITAL PTE LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 intron
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCACTTC 355
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/*tag= e
/number= 2
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1111. .2656
/*tag= c
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2657. .2826
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /product= "IGFBP-1"
/note= "insulin-like
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
762. .5200
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AAH57489
ID AAH57
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XX Human
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Best Local Sim:
Matches 156;
                                                                                                                                                      Human; tissue specific; diagnosis; liver; uterus; ovary; stomach; intemetabolic disease; developmental di
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to detecting the presence or diagnosing the risk of a liver cancer in a patient. The method involves detecting in a biological sample obtained from the patient aberrant expression of a gene encoding an insulin-like growth factor binding protein (IGFBP). The method is useful for detecting the presence or diagnosing the risk of a liver cancer or for screening agents in a patient. The agent is useful for the manufacture of a medicament for treating and/or preventing liver cancer. The present sequence represents a human IGFBP-1 polypeptide encoding genomic DNA (GenBank Accession No. M74587)
                                              10-MAY-2001.
                                                                                                                                                                                                                Human liver cell specific cDNA sequence SEQ ID NO:329.
                                                                                                                                                                                                                                                  10-SEP-2001
                                                                                                                                                                                                                                                                                                              AAH57489 standard; cDNA;
                                                                                                                                      neuroprotective;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Detecting the presence or diagnosing the risk of a liver cancer in patient comprises detecting aberrant expression of a gene encoding insulin-like growth factor binding protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 6128 BP; 1504 A; 1497 C; 1504 G;
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)B; ABB82757.
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                                                                                                                                                                                                                                                                                                                                                                                                                        355
                                                                                                                                    gene therapy; cancer; immunopathology; neuropathology
                                                                                                                                                   ific; diagnosis; brain; heart; skeletal muscle; lung;
ry; stomach; intestine; kidney; pancreas; ss;
developmental disease; cytostatic; immunomodulatory;
                                                                                                                                                                                                                                                entry)
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Pred. No. 5.
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les 72;
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02-NOV-2000; 2000WO-US030396

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RESULT 15
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Best Local S
Matches 156
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                                                                          Glucose-inducible;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New cell and tissue specific polynucleotides useful for diagnosis, prognosis or monitoring of treatments for disorders where the gene associated with a cancer, immunopathology or neuropathology.
                                                                                                     Rat type L
                                                                                                                                                                 AAT43002;
                                                        hyperglycaemia; diabetes;
                                                                                                                                      16-JUL-1997
                                                                                                                                                                                                 AAT43002 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 6134 BP; 1505 A; 1498 C; 1507 G; 1624 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          neuroprotective activities, and can be used in gene therapy. proteins (II) encoded by then are used in high throughput sc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAH57161 to AAH57576 represent céll and sequences (I). (I) can have cytostatic,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-NOV-1999;
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Search completed: June 7, Job time : 341 secs
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Best Local S
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promoter
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Recombinant defective virus contg. heterologous gene under control of glucose inducible promoter - and infected mammalian cells, esp. for gene therapy of diabetes.
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REFERENCE AUTHORS TITLE JOURNAL ACCESSION VERSION KEYWORDS LOCUS DEFINITION RESULT 1 BF236974 COMMENT SOURCE ORGANISM Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. 1 (bases 1 to 1013)

NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999) Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Jeffrey E. Green, M.D.

cDNA Library Preparation: Life Technologies, Inc.

cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov

Plate: LLAM9443 row: j column: 02 mRNA sequence. BF236974 BF236974 1013 bp mRNA linear EST 14-NOV-2000 602025605F1 NCI_CGAP_Li9 Mus musculus cDNA clone IMAGE:4161889 5', High quality sequence stop: 581. Mus musculus BF236974.1 GI:11150891 Mus musculus (house mouse) aq.

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REFERENCE
AUTHORS
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                                                                                                                         Email: genome-res@gsc.riken.go.jp,
URL:http://genome.gsc.riken.go.jp/
CDNA library was prepared and sequenced in Mouse Genome
Encyclopedia Project of Genome Exploration Research Group in Riken
Genomic Sciences Center and Genome Science Laboratory in RIKEN.
                                                                                                                                                                                                                                                             Sciences Center(GSC), Yokohama Institute
The Institute of Physical and Chemical Research (RIKEN)
1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-
Tel: 81-45-503-9222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BY783538 RIKEN full-length enriched, 17.5 days embryo whole body Mus musculus cDNA clone L930176D05 5', mRNA sequence.
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                                                 prepare mouse tissues.
Please visit our web site (http://genome.gsc.riken.jp/) for
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                                               further details.
                                                                                                                                                                                                                                                                                                                                              Laboratory for Genome Exploration Research Group,
                                                                                                                                                                                                                                                                                                                                                                       Contact: Yoshihide Hayashizaki
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /clone="IMAGE:4161889"
/lab_host="PH10B (TI phage-resistant)"
/clone_lib="NCI CGAP_Li9"
/clone_Torgan: liver; Vector: pCMV-SPORT6; Site_1: NotI;
Site_2: SalI; Cloned unidirectionally. Primer: Oligo dT.
Average insert size 1.9 kb. Constructed by Life
Technologies. Note: this is a NCI_CGAP Library."
                        Location/Qualifiers
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Pred. No. 5.8e-18;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
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                                                                                                                                                 Please visit our web
                                                                                                                                                                                                                                                                                                                       1-7-22 Suehiro-cho,
Tel: 81-45-503-9222
Fax: 81-45-503-9216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mammalia; Eutheria;
1 (bases 1 to 331)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12819125
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                                                                                                                               further details.
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db_xref="taxon:10090"
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RS Carninci, P., Waki, K., Shiraki, T., Konno, H., Shibata, K., Itoh, M., Aizawa, K., Arakawa, T., Ishii, Y., Sasaki, D., Bono, H., Kondo, S., Sugahara, Y., Saito, R., Osato, N., Fukuda, S., Sato, K., Watahiki, A., Hirozane-Kishikawa, T., Nakamura, M., Shibata, Y., Yasunishi, A., Kikuchi, N., Yoshiki, A., Kusakabe, M., Gustincich, S., Beisel, K., Pavan, W., Aidinis, V., Nakagawara, A., Held, W.A., Iwata, H., Kono, T., Nakauchi, H., Lyons, P., Wells, C., Hume, D.A., Fagiolini, M., Nakauchi, H., Lyons, P., Wells, C., Hume, D.A., Fagiolini, M., Hensch, T.K., Brinkmeier, M., Camper, S., Hirota, J., Mombaerts, P., Muramatsu, M., Okazaki, Y., Kawai, J. and Hayashizaki, Y. Targeting a complex transcriptome: the construction of the mouse full-length cDNA encyclopedia
Genome Res. 13 (6B), 1273-1289 (2003)
                                                                                                                                                                                                                                                 Email: genome-res@gsc.riken.go.jp,
URL:http://genome.gsc.riken.go.jp/
URL:http://genome.gsc.riken.go.jp/
cDNA library was prepared and sequenced in Mouse Genome
Encyclopedia Project of Genome Exploration Research Group in Riken
Genomic Sciences Center and Genome Science Laboratory in RIKEN.
Division of Experimental Animal Research in Riken contributed to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center(GSC), Yokohama Institute
The Institute of Physical and Chemical Research (RIKEN)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BY794229 331 bp ml
BY794229 RIKEN full-length enriched,
Mus musculus cDNA clone L930292H24 5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Contact: Yoshihide Hayashizaki
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mus musculus (house mouse)
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/organism="Mus musculus"
/mol_type="mRNA"
/strain="C57BL/6J"
                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tissue_type="whole body"
/dev_stage="17.5 days embryo"
/clone_lib="RIKEN full-length enriched, 17.5 days embryo
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/clone="L930176D05"
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/strain="C57BL/6J"
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                                                                                                                                                                                        site (http://genome.gsc.riken.jp/)
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Pred. No. 3.9e-15;
D; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Yokohama, Kanagawa 230-0045, Japan
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d, 17.5 days embryo whole
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RESULT 4
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E 1 (bases 1 to 354)

Carninci, P., Waki, K., Shiraki, T., Konno, H., Shibata, K., Itoh, M., Alzawa, K., Arakawa, T., Ishii, Y., Sasaki, D., Bono, H., Kondo, S., Sugahara, Y., Saito, R., Osato, N., Fukuda, S., Sato, K., Watahiki, A., Hirozane-Kishikawa, T., Nakamura, M., Shibata, Y., Yasunishi, A., Kikuchi, N., Yoshiki, A., Kusakabe, M., Gustincich, S., Beisel, K., Pavan, W., Aidinis, V., Nakagawara, A., Held, W.A., Iwata, H., Kono, T., Nakauchi, H., Lyons, P., Wells, C., Hume, D.A., Fagiolini, M., Nakauchi, H., Lyons, P., Wells, C., Hume, D.A., Fagiolini, M., Nakauchi, H., Kono, T., Nakauchi, H., Lyons, P., Wells, C., Hume, D.A., Fagiolini, M., Muramatsu, M., Okazaki, Y., Kawai, J. and Hayashizaki, Y.

Targeting a complex transcriptome: the construction of the mouse full-length cDNA encyclopedia
L. Genome Res. 13 (6B), 1273-1289 (2003)
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                                                                                                                                                                                                                                                                                                                                               Email: genome-res@gsc.riken.go.jp,
URL:http://genome.gsc.riken.go.jp/
cDNA library was prepared and sequenced in Mouse Genome
Encyclopedia Project of Genome Exploration Research Group in Ri
Genomic Sciences Center and Genome Science Laboratory in RIKEN.
Division of Experimental Animal Research in Riken contributed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center(GSC), Yokohama Institute
The Institute of Physical and Chemical Research (RIKEN)
1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan
Tel: 81-45-503-9222
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BY771317.1 GI:39697955
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354 bp mRNA linear EST 10-I
BY771317 RIKEN full-length enriched, 17.5 days embryo whole
Mus musculus cDNA clone L930052G15 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Contact: Yoshihide Hayashizaki
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                                                                                                                                                                                                                                                                              details.
                                                                                                                                                                                                                                                                                            visit our web site (http://genome.gsc.riken.jp/) for
/tissue_type="whole body"
/dev_stage="17.5 days embryo"
/clone_lib="RIKEN full-length enriched,
                                                                                                            /strain="C57BL/6J"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /tissue_type="whole body"
/dev_stage="17.5 days embryo"
/clone_lib="RIKEN full-length enriched, 17.5 days embryo
whole body"
                                                                                      /clone="L930052G15"
                                                                                                                                                                                           organism="Mus musculus"
                                                                                                                                                                                                                                                ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23.6%;
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Pred. No. 4e
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          354 bp
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17.5 days embryo
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ORGANISM
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AI785818
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VERSION
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             329 TGCCCAGAGAGCTGTGACCACCACTTCCGCTACTAGCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        269 ATGGTCCACTGCCCGCGAGACACAAACCCAGCGAGCATTGAACACTGCACACGGCCATC 328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               62 TGCCCAGAGAGCTGTGACCACCATTGCCACTACTATCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unpublished (1999)
Other ESTS: ui78h05.x1
Contact: Marra M/WashU-NCI Mouse EST project 1999
Washington University School of Medicine
Mashington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. 1 (bases 1 to 401)

Marra,M., Hillier,L., Kucaba,T., Martin,J., Beck,C., Wylie,T., Underwood,K., Steptoe,M., Theising,B., Allen,M., Bowers,Y., Person,B., Swaller,T., Gibbons,M., Pape,D., Harvey,N., Schurk,R., Ritter,E., Kohn,S., Shin,R., Jackson,Y., Cardenas,M., McCann,R., Waterston,R. and Wilson,R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A1788918 401 bp mRNA linear EST 02-
ui78h05.y1 Sugano mouse liver mlia Mus musculus cDNA clone
IMAGE:1888569 5' similar to gb:X81579 M. musculus mRNA for
insulin-like growth factor binding (MOUSE);, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Seq primer: custom primer used 
High quality sequence stop: 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Email: mouseest@watson.wustl.edu
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tel: 314 286 1800
Fax: 314 286 1810
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    quality sequence stop: 126.
Location/Qualifiers
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/Clone lib="Sugano mouse liver mlia"
//Clone lib="Sugano mouse liver mlia"
//note="Organ: liver; Vector: pME18S-FL3; Site_1: DraIII
(CACTGTGTG); Site_2: DraIII (CACCATGTG); 1st strand cDNA
was primed with an oligo(dT) primer
[ATGTGGCCTTTTTTTTTTTTTTTTTT]; double-stranded cDNA was
ligated to a DraIII adaptor [TGTTGGCCTACTGG], digested
and cloned into distinct DraIII sites of the pME18S-FL3
vector (5' site CACTGTGTG, 3' site CACCATGTG). XhoI should
be used to isolate the cDNA insert. Size selection was
performed to exclude fragments <1.5kb. Library
constructed by Dr. Sumio Sugano (University of Tokyo
Institute of Medical Science). Custom primers for
sequencing: 5' end primer CTTCTGCTCTAAAAGCTGCG and 3' end
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            whole body"
                                                                                                                                                                                                                                                                                                                                            /dev_stage="adult"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                      'sex="female"
                                                                                                                                                                                                                                                                                                                                                                                                                            clone="IMAGE:1888569"
                                                                                                                                                                                                                                                                                                                                                                                                                                                    db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  strain="C57BL"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   organism="Mus musculus"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     type="mRNA"
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Pred. No. 4.1e-15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
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ORGANISM
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VERSION
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AI196314
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MGI:972152
Seq primer:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   uilla07.yl Sugano mouse liver mlia Mus musculus cDNA clone IMAGE:1887828 5' similar to gb:M59316 rnal INSULIN-LIKE GROWTH FACTOR BINDING PROTEIN 1 PRECURSOR (HUMAN); gb:X81579 M.musculus mRNA for insulin-like growth factor binding (MOUSE);, mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 (bases 1 to 480)
Marra,M., Hillier,L., Allen,M., Bowles,M., Dietrich,N., Dub
Geisel,S., Kucaba,T., Lacy,M., Le,M., Martin,J., Morris,M.,
Schellenberg,K., Steptce,M., Tan,F., Underwood,K., Moore,B.
Theising,B., Wylie,T., Lennon,G., Soares,B., Wilson,R. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Email: mouseest@watson.wustl.edu
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Washington University School of MedicineP
4444 Forest Park Parkway, Box 8501, St. Ld
Tel: 314 286 1800
Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WashU-HHMI Mouse EST Project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unpublished (1996)
Contact: Marra M/Mouse EST Project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The WashU-HHMI Mouse EST Project
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  quality sequence stop: :
Location/Qualifiers
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/clone_lib="Sugano mouse liver mlia"
/note="Organ: liver; Vector: pMEL8S-FL3; Site 1: DraIII
/note="Organ: liver; Vector: pMEL8S-FL3; Site 1: DraIII
(CACTGTGTG); Site_2: DraIII (CACCATGTG); lst Strand cDNA
was primed with an oligo(dT) primer
[ATGTGGCCTTTTTTTTTTTTTTTTT]; double-stranded cDNA was
ligated to a DraIII adaptor [TGTTGGCCTACTGG], digested
and cloned into distinct DraIII sites of the pMEL8S-FL3
vector (5' salte CACTGTGTG, 3' site CACCATGTG). XhoI should
be used to isolate the cDNA insert. Size selection was
performed to exclude fragments <1.5kb. Library
constructed by Dr. Sumio Sugano (University of Tokyo
Institute of Medical Science). Custom primers for
sequencing: 5' end primer CTTCTGCTCTAAAAGCTGCG and 3' end
                                                                                                                                                                                                                                                                                                                                                     /dev_stage="adult"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mol_type="mRNA"
/strain="C57BL"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                      'sex="female"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                 lone="IMAGE:1887828"
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SOURCE
ORGANISM
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AI530146
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VERSION
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
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91; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unpublished (1999)
Contact: Marra M/WashU-NCI Mouse EST Project 1999
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Marra,M., Hiller,L., Kucaba,T., Martin,J., Beck,C., Wylie,T., Underwood,K., Steptoe,M., Theising,B., Allen,M., Bowers,Y., Person,B., Swaller,T., Gibbons,M., Pape,D., Harvey,N., Schurk,R. Ritter,E., Kohn,S., Shin,T., Jackson,Y., Cardenas,M., McCann,R., Waterston,R. and Wilson,R.
Waterston,R. and Wilson,R.
The WashU-NCI Mouse EST Project 1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Email: mouseest@watson.wustl.edu
This clone is available royalty-free through LLNL;
IMAGE Consortium (info@image.llnl.gov) for further:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Fax: 314 286 1810
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                                                                                                                                                                                                                                                                                                                                                                                           /mol type="mRNA"
/strain="C57BL"
/db xref="taxon:10090"
/clone="IMAGE:1889609"
/sex="female"
be used to isolate the cDNA insert. Size selection was performed to exclide fragments <1.5kb. Library constructed by Dr. Sumio Sugano (University of Tokyo Institute of Medical Science). Custom primers for sequencing: 5' end primer CTTCTGCTCTAAAAGCTGCG and 3' end
                                                                                                /clone lib="Sugano mouse liver mlia"
/note="Organ: liver; Vector: pWE18S-FL3; Site 1: DrallI (CACCATGTG); lst strand cDNA (CACTGTGTG); Site 2: DrallI (CACCATGTG); lst strand cDNA was primed with an oligo(dT) primer
[ATGTGGCCTTTTTTTTTTTTTTTTTTT]; double-stranded cDNA was ligated to a DrallI adaptor [TGTTGGCCTACTGG], digested and cloned into distinct DrallI sites of the pWE18S-FL3 vector (5' site CACTGTGTG, 3' site CACCATGTG). XhoI shou be used to isolate the CDNA insert. Size selection was
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                                                                                                                                                                                                                                                                                                                                           dev_stage="adult"
lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         organism="Mus musculus"
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Pred. No. 9.5e-15;
""" amatches 7;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Email: mouseest@watson.wustl.edu This clone is available royalty-free through LLNL ; contact the IMAGE Consortium (info@image.llnl.gov) for further information.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WashIngton University School of MedicineP
WashIngton University School of MedicineP
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 (bases 1 to 765)

Marra, M., Hillier, L., Allen, M., Bowles, M., Dietrich, N., Dubu, Geisel, S., Kucaba, T., Lacy, M., Le, M., Martin, J., Morris, M., Schellenberg, K., Steptoe, M., Tan, F., Underwood, K., Moore, B., Theising, B., Wylle, T., Lennon, G., Soares, B., Wilson, R. and Waterston, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The WashU-HHMI Mouse EST Project Unpublished (1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ue31e07.y1 Sugano mouse liver mlia Mus musculus cDNA clone IMAGE:1481988 5' similar to gb:X81579 M.musculus mRNA for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tel: 314 286 1800
Fax: 314 286 1810
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Contact: Marra M/Mouse EST Project
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     insulin-like growth factor binding (MOUSE);, mRNA sequence.
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Location/Qualifiers
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                                                                              /clone lib="Sugano mouse liver mlia"
/note="Organ: liver; Vector: pMEL8S-Fi3; Site 1: DraIII
(CACTGTGTG); Site 2: DraIII (CACATGTG); 1st Strand cDNA
was primed with an oligo(dT) primer
[ATGTGGCCTTTTTTTTTTTTTTTTTT]; double-stranded cDNA was
ligated to a DraIII adaptor [TGTTGGCCTACTGG], digested
and cloned into distinct DraIII sites of the pMEL8S-Fi3
vector [5' site CACTGTGTG, 3' site CACCATGTG). XhoI should
be used to isolate the cDNA insert. Size selection was
performed to exclude fragments <1.5kb. Library
constructed by Dr. Sumio Sugano (University of Tokyo Institute of Medical Science). Custom primers for sequencing: 5' end primer CTTCTGCTCTAAAAGCTGCG and 3' primer CGACCTGCAGCACA."
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                                                                                                                                                                                                                                                                                                                                                                                          /strain="C57BL"
/db_xref="taxon:10090"
/clone="IMAGE:1481988"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                              dev_stage="adult"
                                                                                                                                                                                                                                                                                                                                                                         sex="female"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         organism="Mus musculus"
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                                                                                                                                                                                                                                                                                                                      host="DH10B"
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Pred. No. 1.
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Email: mouseest@watson.wustl.edu
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This clone is available royalty-free through LLNL; contact the
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unpublished (1999)
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
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/Clone_lib="Sugano mouse liver mlia"
//Clone_lib="Sugano mouse liver mlia"
//Clone="Organ: liver; Vector: pME18S-PL3; Site_1: DraIII
(CACCATGTGTG); Site_2: DraIII (CACCATGTG); 1st strand cDNA
was primed with an oligo(dT) primer
[ATCTGGCCTTTTTTTTTTTTTTTTT]; double-stranded cDNA was
ligated to a DraIII adaptor [TGTTGGCCTACTGG), digested
and cloned into distinct DraIII sites of the pME18S-PL3
vector (5' site CACTCTGTG, 3' site CACCATGTG). Xhol should
be used to isolate the cDNA insert. Size selection was
performed to exclude fragments <1.5kb. Library
constructed by Dr. Sumio Sugano (University of Tokyo
Institute of Medical Science). Custom primers for
sequencing: 5' end primer CTTCTGCTCTAAAAGCTGCG and 3' end
primer CGACCTGCAGCTCGAGCACA."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /mol_type="mRNA"
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/lab_host="DH10B"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AI529939 799 bp mRNA linear EST 18-MAR-1s ui87c08,yl Sugano mouse liver mlia Mus musculus CDNA Clone IMAGE:1889392 5' similar to gb:M59316 rnal INSULIN-LIKE GROWTH FACTOR BINDING PROTEIN 1 PRECURSOR (HUMAN); gb:X81579 M.musculus mRNA for insulin-like growth factor binding (MOUSE);, mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Н
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalla; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. 1 (bases 1 to 799)

Marra,M., Hillier,L., Kucaba,T., Martin,J., Beck,C., Wylie,T., Underwood,K., Steptoe,M., Theising,B., Allen,M., Bowers,Y., Person,B., Swaller,T., Gibbons,M., Pape,D., Harvey,N., Schurk,R., Ritter,E., Kohn,S., Shin,T., Jackson,Y., Cardenas,M., McCann,R., Waterston,R. and Wilson,R. The WashU-NCI Mouse EST Project 1999
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MGI:973716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This clone is available royalty-free through LINL; contact the IMAGE Consortium (info@image.llnl.gov) for further information.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Email: mouseest@watson.wustl.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tel: 314 286 1800
Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Washington University School of Medicine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Contact: Marra M/WashU-NCI Mouse EST Project 1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mus musculus (house mouse)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         quality sequence stop:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                     /clone lib="Sugano mouse liver mlia"
/note="Organ: liver; Vector: pMEL8S-FL3; Site 1: DraIII
/note="Organ: liver; Vector: pMEL8S-FL3; Site 1: DraIII
(CACCTGTGTG); Site 2: DraIII (CACCATGTG); lst Strand cDNA
was primed with an oligo(dT) primer
[ATGTGGCCTTTTTTTTTTTTTTTTTT]; double-stranded cDNA was
ligated to a DraIII adaptor [TGTTGGCCTACTGG], digested
and cloned into distinct DraIII sites of the pMEL8S-FL3
vector (5' site CACTGTGTG, 3' site CACCATGTG). XhoI should
be used to isolate the cDNA insert. Size selection was
                  performed to exclude fragments <1.5kb. Library constructed by Dr. Sumio Sugano (University of Tokyo Institute of Medical Science). Custom primers for sequencing: 5'_end_primer_CTTCTGCTCTAAAAGCTGCG and 3'
                                                                                                                                                                                                                                                                                                                                                                                                                         organism="Mus musculus"
/mol_type="mRNA"
/strain="C57BL"
                                                                                                                                                                                                                                                                                                                                                                             /db_xref="taxon:10090"
/clone="IMAGE:1889392"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                               dev_stage="adult"
lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                             sex="female"
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ORGANISM
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AI790802
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
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Other_ESTs: uk28b10.x1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mus musculus (house mouse)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (bases 1 to 848)
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                                                                                                                                                                                                                                                                                                                                    /dev_stage="adult"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                  /sex="female"
                                                                                                                                                                                                                                                                                                                                                                                                                                              mol_type="mRNA"
/strain="C57BL"
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330 GCCCAGAGAGCTGTGACCACCACTTCCGCTACTAGCTA 367
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848 DP mkwA LINGAL DNA Clone Uk28b10.y1 Sugano mouse kidney mkia Mus musculus cDNA clone IMAGE:1970299 5' similar to gb:X81579 M.musculus mRNA for insulin-like growth factor binding (MOUSE);, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Tel: 314 286 1800

Fax: 314 286 1810

Email: mouseest@watson.wustl.edu

This clone is available royalty-free through LLNL; contact the IMAGE Consortium (info@image.llnl.gov) for further information.

MGI:987039
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The WashU-NCI Mouse EST Project 1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Contact: Marra M/WashU-NCI Mouse EST Project 1999
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Seq primer: custom primer used
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performed to exclude fragments <1.5kb. Library constructed by Dr. Sumio Sugano (University of Tokyo Institute of Medical Science) Custom primers for sequencing: 5' end primer CTTCTGCTCTAAAAGCTGCG and 3' end primer CGACCTGCAGCTCGAGCACA."
                                                                                                                                                                         /clone lib="Sugano mouse kidney mkia"
/note="Organ: kidney; Vector: pME185-FL3; Site 1: DralII (CACCATGTG); 1st strand cDNA (CACTGTGTG); Site 2: DralII (CACCATGTG); 1st strand cDNA was primed with an oligo(dT) primer [ATGTGGCCTACTGG], digested to a DralII adaptor [TGTTGGCCTACTGG], digested and cloned into distinct DralII sites of the pME185-FL3 vector (5' site CACTGTGTG, 3' site CACCATGTG). XhoI should be used to isolate the CDNA insert. Size selection was
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hillier, L., Kucaba, T., Martin, J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              db_xref="taxon:10090"
clone="IMAGE:1970299"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           organism="Mus musculus"
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Pred. No. 1.2e-14;
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DB 9;

Length 848;

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REFERENCE
AUTHORS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Contact: Marra M/WashU-NCI Mouse EST Project 1999
Washington University School of Medicine
Washington Park Parkway, Box 8501, St. Louis, MO 63108, USA
Tel: 314 286 1800
Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus 1 (bases 1 to 852)

Marra, M., Hillier, L., Kucaba, T., Martin, J., Beck, C., Wylie, T., Underwood, K., Steptoe, M., Theising, B., Allen, M., Bowers, Y., Person, B., Swaller, T., Gibbons, M., Pape, D., Harvey, N., Schurk, R., Ritter, E., Kohn, S., Shin, T., Jackson, Y., Cardenas, M., McCann, R., Ritter, S., Kohn, S., Shin, T., Jackson, Y., Cardenas, M., McCann, R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ui95g10.yl Sugano mouse liver mlia Mus musculus cDNA clone IMAGE:1890210 5' similar to 95.M59316 rnal INSULIN-LIKE GROWTH FACTOR BINDING PROTEIN I PRECURSOR (HUMAN); gb.:881579 M.musculus mRNA for insulin-like growth factor binding (MOUSE);, mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Email: mouseest@watson.wustl.edu
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Waterston, R. and Wilson, R. The WashU-NCI Mouse EST Project 1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AI528304.1 GI:4442439
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  primer: custom primer used
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              quality sequence stop: 478.
Location/Qualifiers
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                   /clone_lib="Sugano mouse liver mlia"
//clone_lib="Sugano mouse liver mlia"
//note="Organ: liver; Vector: pME18S.FL3; Site_1: DraIII
(CACTGTGTG); Site_2: DraIII (CACCATGTG); 1st strand cDNA
was primed with an oligo(dT) primer
[ATGTGGCCTTTTTTTTTTTTTTT]; double-stranded cDNA was
ligated to a DraIII adaptor [TGTTGGCCTACTGG], digested
and cloned into distinct DraIII sites of the pME18S-FL3
vector (5' site CACTGTGTG, 3' site CACCATGTG], XhoI should
be used to isolate the cDNA insert. Size selection was
performed to exclude fragments <1.5kb. Library
constructed by Dr. Sumio Sugano (University of Tokyo
Institute of Medical Science). Custom primers for
sequencing: 5' end primer CTGTCTGCTTTAAAAGCTGCG and 3' end
primer CGACCTGCAGCTCGAGCACA."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    organism="Mus musculus"
/mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                   dev_stage="adult"
                                                                                                                                                                                                                                                                                                                                                                                                                                                    sex="female"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          clone="IMAGE:1890210"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   db_xref="taxon:10090"
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                                                                                                                                                                                                                                                                                                                                                                                             lab_host="DH10B"
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Pred. No. 1.3e-14;
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REFERENCE
AUTHORS
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AI196154
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ORGANISM
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JOURNAL
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AI196154
AI196164
AI196167
AI196169
IMAGE:1887663 5' similar to gb:M59316 rnal INSULIN-LIKE GROWTH
FACTOR BINDING PROTEIN 1 PRECURSOR (HUMAN); gb:X81579 M.musculus
mRNA for insulin-like growth factor binding (MOUSE);, mRNA
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1 (bases 1 to 605)

Marra, M., Hillier, L., Allen, M., Bowles, M., Dietrich, N., Dubuque, T., Geisel, S., Kucaba, T., Lacy, M., Le, M., Martin, J., Morris, M., Schellenberg, K., Steptoe, M., Tan, F., Underwood, K., Moore, B., Theising, B., Wylie, T., Lennon, G., Soares, B., Wilson, R. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Email: mouseest@watson.wustl.edu
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
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Fax: 314 286 1810
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The WashU-HHMI Mouse EST Project
Unpublished (1996)
Contact: Marra M/Mouse EST Project
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AI196154
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/Clone lib="Sugano mouse liver mlia"
//note="Torgan: liver; Vector: pME18S-FL3; Site 1: DraIII
/(CACCMTGTG); Site 2: DraIII (CACCATGTG); lst Strand cDNA
was primed with an oligo(dT) primer
[ATGTGGCCTTTTTTTTTTTTTTT]; double-stranded cDNA was
ligated to a DraIII adaptor. [TGTTGGCCTACTGG], digested
and cloned into distinct DraIII sites of the pME18S-FL3
vector (5' site CACTGTGTG, 3' site CACCATGTG). XhoI should
be used to isolate the cDNA insert. Size selection was
performed to exclude fragments <1.5kb. Library
constructed by Dr. Sumio Sugano (University of Tokyo
Institute of Medical Science). Custom primers for
sequencing: 5' end primer CTTCTGCTCTAAAAGCTGCG and 3' end
primer CGACCTGCAGCTCGAGCACA."
                                                                                                                                                                                                                                                                                                                                                                                                   /db_xref="taxon:10090"
/clone="IMAGE:1887663"
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                                                                                                                                                                                                                                                                                                                                   /dev_stage="adult"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                  /sex="female"
                                                                                                                                                                                                                                                                                                                                                                                                                                                      /mol_type="mRNA"
/strain="C57BL"
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Pred. No. 1.3e-14;
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RESULT 14
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ui73a06.y1 Sugano mouse liver mlia Mus musculus cDNA clone IMAGE:1888018 5' similar to gb:X81579 M.musculus mRNA for insulin-like growth factor binding (MOUSE);, mRNA sequence.
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The WashU-NCI Mouse EST Project 1999
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Washington University School of Medicine 4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Other_ESTs: ui73a06.x1
Contact: Marra M/WashU-NCI Mouse EST Project 1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AI785039.1 GI:5332755
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This clone is available royalty-free through LLNL; IMAGE Consortium (info@image.llnl.gov) for further:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Email: mouseest@watson.wustl.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Tel: 314 286 1800 Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AI785039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MGI:972342
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCCCAGAGAGCTGTGACCACCACCTTCCGCTACTAGCTA 367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGGTCCACTGCCCGCGGAGACACACCCCAGCGAGCATTGAACACTGCACACGGTCGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (bases 1 to 380)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  primer: custom primer used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               quality sequence stop: 353.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
             /clone_lib="Sugano mouse liver mlia"
/note="Torgan: liver; Vector: pME185.FL3; Site_1: DraIII
(CACCATGTG); lst = 2: DraIII (CACCATGTG); lst strand cDNA
was primed with an oligo(dT) primer
[ATGTGGCCTTTTTTTTTTTTTT]; double-stranded cDNA was
ligated to a DraIII adaptor [TGTTGGCCTACTGG] digested
and cloned into distinct DraIII sites of the pME185.FL3
vector (5' site CACTGTGTG, 3' site CACCATGTGG). XhoI should
be used to isolate the cDNA insert. Size selection was
performed to exclude fragments <1.5tb. Library
constructed by Dr. Sumio Sugano (University of Tokyo
Institute of Medical Science). Custom primers for
sequencing: 5' end primer CTCTGCTCTAAAAGCTGCG and 3' end
primer CGACCTGCAGCTCGAGCACA."
                                                                                                                                                                                                                                                                                                                                                                                                                                     /clone="IMAGE:1888018"
/sex="female"
                                                                                                                                                                                                                                                                                                                                                                                  dev_stage="adult"
lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             mol_type="mRNA"
/strain="C57BL"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       _xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22.9%;
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Pred. No. 3.2e-14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          mRNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
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REFERENCE
AUTHORS
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ORGANISM
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VERSION
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W30013
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
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Best Local S
Matches 87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     333 CAGAGAGCTGTGACCACCACTTCCGCTACTAGCTA 367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     273 TCCACTGCCCGAGACACAAACCCAGCGAGCATTGAACACTGCACACGGCCATCTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
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87; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Contact: Marra M/Mouse EST Project
WashU-HHMI Mouse EST Project
Washington University School of MedicineP
4444 Forest Park Parkway, Box 8501, St. Lo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 (bases 1 to 332)
Marra,M., Hillier,K., Allen,M., Bowles,M., Dietrich,N., Dubuque,T.,
Geisel,S., Kucaba,T., Lacy,M., Le,M., Martin,J., Morris,M.,
Schellenberg,K., Steptoe,M., Tan,F., Underwood,K., Moore,B.,
Theising,B., Wylie,T., Lennon,G., Soares,B., Wilson,R. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mus musculus (house mouse)
Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             W30013 332 bp mRNA linear EST 11-
mc24c07.rl Soares mouse p3NMP19.5 Mus musculus cDNA clone
IMAGE:349452 5' similar to gb:X81579 M.musculus mRNA for
insulin-like growth factor binding (MOUSE);, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 TCCACTGCCCGCGGGGACACACCCCAGCGAGCATTGAACACTGCATACGGCCGTCTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Email: mouseest@watson.wustl.edu
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tel: 314 286 1800
Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                           Seq primer: mob.REGA+ET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unpublished (1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The WashU-HHMI Mouse EST Project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            W30013.1 GI:1310178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGAGAGCTGTGACCACCATTGCCACTACTATCTA 95
                                                                                                                                                                                                                                                                                                                                                                                                        quality sequence stop: 250
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/mol_type="mRNA"
/db xref="taxon:10090"
/db yref="taxon:10090"
/clone="IMAGE:349452"
/dev stage="19.5 dpc total fetus"
/lab_host="DH10B (ampicillin_resistant)"
                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                              organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     22.1%;
91.6%;
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Pred. No. 2e-13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Louis, MO 63108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 380;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EST 11-SEP-1996
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Best Local Similarity

Conservative

0,

Mismatches

19.7%;

Score 73.2; DB 14; Pred. No. 8.5e-11;

Length

ç

Gaps

0

Searc	Db	Ś	₽	Ś
Search completed: June 7, 2004, 14:45:58 Job time : 2495 secs	77 GIGACCACCATTGCCACTACCTA 102	342 GTGACCACTTCCGCTACTAGCTA 367	17 CGAGGAGACACACCCCAGCGAGCATTGAACACTGCACACGGCCGTCTGCCCCAGAGAGCT 76	282 CGCCGAGACACAAACCCCAGCGAGCATTTGAACACTGCACACGGCCATCTGCCCAGAGAGACT 341

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